# **APPENDIX A**

CONSULTATION LETTERS UNDER SECTION 7
OF THE ENDANGERED SPECIES ACT



## United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

3817 Luker Road Cortland, NY 13045

March 5, 2004

Ms. Pierina Noceti NEPA Specialist U.S. Department of Energy National Energy Technology Laboratory P.O. Box 10940 Pittsburgh, PA 15236-0940

Dear Ms. Noceti:

This responds to your letter of February 19, 2004, requesting information on the presence of endangered or threatened species in the vicinity of the proposed multi-pollutant control system at the Greenidge Generating Station in the Town of Torrey, Yates County, New York.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Therefore, no further Endangered Species Act coordination or consultation with the U.S. Fish and Wildlife Service (Service) is required. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally listed and proposed endangered and threatened species in New York\* is available for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate New York State Department of Environmental Conservation regional office(s),\* and:

New York State Department of Environmental Conservation New York Natural Heritage Program Information Services 625 Broadway Albany, NY 12233-4757 (518) 402-8935

Since wetlands may be present, you are advised that National Wetlands Inventory (NWI) maps may or may not be available for the project area. However, while the NWI maps are reasonably

accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Copies of specific NWI maps can be obtained from:

Cornell Institute for Resource Information Systems 302 Rice Hall Cornell University Ithaca, NY 14853 (607) 255-4864

Work in certain waters of the United States, including wetlands, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).\*

If you require additional information or assistance please contact Michael Stoll at (607) 753-9334.

Markh

David A. Stilwell Field Supervisor

\*Additional information referred to above may be found on our website at: http://nyfo.fws.gov/es/esdesc.htm.

cc: NYSDEC, Avon, NY (Environmental Permits) NYSDEC, Albany, NY (Natural Heritage Program) COE, Buffalo, NY U.S. Fish and Wildlife Service New York Field Office 3817 Luker Road Cortland, NY 13045

To provide a timely response to future requests for endangered species comments in New York, please include the following in future inquiries:

- 1. A concise brief description of the project/action.
- 2. Name of the hamlet/village/city/town/county where the project/action occurs.
- 3. The latitude and longitude of the project/action, i.e.: 42° 13' 28" / 76° 56' 30". If the project/action is linear, you may provide coordinates for both ends or just one near center.
- 4. A map showing the project/action location. Preferrably the map should be a U.S. Geological Survey quadrangle map (USGS Quad). You need only provide a copy of that portion where the project/action occurs. Please provide the name(s) of the USGS quadrangle.

If providing only a portion, indicate where the portion would be located on the full quadrangle, i.e.



Providing the information above will assist us in responding to your needs.

If you require additional information please contact Michael Stoll at (607) 753-9334.





## National Energy Technology Laboratory

February 19, 2004

Chief, Division of Endangered Species U.S. Fish and Wildlife Service 3817 Luker Road Cortland, NY 13045

Dear Sir:

The United States Department of Energy (DOE) is considering participation, through a 4.5-year cooperative agreement with CONSOL Energy, Inc., in a project to demonstrate an integrated, multi-pollutant control system on the 104-megawatt, Unit 4 boiler at the AES Greenidge Generating Station near Dresden, NY. Under the cooperative agreement, CONSOL and AES would design, install, operate, and evaluate a multi-pollutant control system for mercury, SO<sub>2</sub>, and NO<sub>x</sub>, acid gases, and particulate emissions control at the Greenidge Station.

The proposed project would require removal of the existing electrostatic precipitator on Unit 4 and installation of a selective catalytic reduction reactor for NO<sub>x</sub> control and a circulating dry scrubber for SO<sub>2</sub>, Hg, HCl, HF, and SO<sub>3</sub> control. The proposed control system would be expected to achieve the following control targets:

- NO<sub>x</sub> reduction to less than 0.122 lb/million Btu when firing coal or coal-biomass blends
- SO<sub>2</sub> reduction by 95% while the boiler is firing coal with more than 2% sulfur
- Mercury reduction by 90% using activated carbon injection
- Reductions in emissions of other acid gases (HCl, HF, and SO<sub>3</sub>) by 95%

A description of the proposed project and graphics depicting its location are provided as Enclosures.

As part of our coordination and consultation responsibilities, and to comply with both Section 7 of the Endangered Species Act of 1973, as amended, and provisions of the Fish & Wildlife Coordination Act, we would appreciate receiving any information you have on wildlife resources, including endangered and threatened species or critical habitat, in the project area.

Based on the scope of the proposed project, DOE plans to prepare an Environmental Assessment (EA), in accordance with requirements of the National Environmental Policy Act, to analyze, document, and disseminate information on the potential environmental consequences of the proposed project. Information that you provide will be incorporated and appropriately addressed in the EA. If your initial review concludes that no endangered or threatened species (or their habitat) are present in the project area, and that neither protected species nor their habitat would be affected by the proposed action, a written acknowledgement of that conclusion would be appreciated. In any case, the information that you provide will be considered in preparing a draft EA, which will be provided for review upon availability.





# National Energy Technology Laboratory

February 19, 2004

Should you require additional information, please contact me by telephone at 412-386-5428 or by e-mail at 'Pierina.Noceti@netl.doe.gov.'

Sincerely,

Pierina Noceti NEPA Specialist

Enclosures

### Description of the Proposed Action

### GREENIDGE MULTI-POLLUTANT CONTROL PROJECT

The proposed action is for DOE to provide, through a 4.5-year cooperative agreement with CONSOL Energy, Inc., financial assistance for demonstrating an integrated, Multi-Pollutant Control system on the 104-megawatt, Unit 4 boiler at the AES Greenidge Generating Station near Dresden, NY. Under the cooperative agreement, CONSOL and AES would design, install, operate, and evaluate the multi-jpollutant control system for mercury, SO<sub>2</sub>, and NO<sub>x</sub>, acid gas, and particulate emissions control for application on coal-fired power generation systems.

The Multi-Pollutant Control system would be designed for long-term commercial operation following completion of the cooperative agreement with DOE. The total value of the cooperative agreement would be \$32.8 million; DOE's share would be approximately \$14.5 million.

The Greenidge Multi-Pollutant Control Project will demonstrate the commercial readiness of an emissions control system that, because of its low capital, operating, and maintenance costs, is particularly well suited to meet the emissions reduction requirements of a large group of smaller existing electricity generating units. The multi-pollutant control system offers the potential for low-cost, deep cleaning of air emissions, especially mercury, in support of the President's Clear Skies Initiative. Under the President's Clear Skies Initiative, emissions of SO<sub>2</sub> from power plants would be reduced by 73% from current emissions of 11 million tons annually to a cap of 4.5 million tons annually in 2010 and to 3 million tons annually in 2018. Emissions of NO<sub>x</sub> would be reduced by 67% from current a current level of 5 million tons annually to a cap of 2.1 million tons annually in 2008 and to 1.7 million tons annually in 2018. Mercury emissions would be reduced by 69% from current level of 48 tons to a cap of 26 tons in 2010 and 15 tons in 2018. The proposed project addresses the need for mercury emission reduction from coal-fired power plants, which stems from EPA's December 2000 announcement of plans to regulate emissions of mercury from coal-fired power plants. Successful implementation of the proposed technology demonstration would help provide an approach for achieving timely compliance with future mercury regulations.

Unit 4 at the Greenidge Generating Station would be the host facility for the proposed project. AES Greenidge Unit 4 is a tangentially fired, 104-megawatt electricity generator burning bituminous coals with sulfur content ranging from 1.4 to 2.8 percent. Currently, Unit 4 is equipped with only an electrostatic precipitator for emissions control. Unit 4 is considered to be representative of 492 coal-fired electricity generators in the United States with capacities ranging from 50 to 300 megawatts, which collectively represent about 25% of the U.S. coal-fired generating capacity.

The proposed project would require removal of the existing electrostatic precipitator on Unit 4 and installation of a single-bed, in-duct, selective catalytic reduction (SCR) reactor for NO<sub>x</sub> control and a circulating dry scrubber (CDS) for SO<sub>2</sub>, Hg, HCl, HF, and SO<sub>3</sub> control. The proposed control system would be expected to achieve the following control targets:

- NO<sub>x</sub> reduction to less than 0.122 lb/million Btu using a single-bed, in-duct SCR unit in combination
  with low-NO<sub>x</sub> combustion technology when firing coal or coal-biomass blends
- SO<sub>2</sub> reduction by 95% using the CDS system while the boiler is firing coal with more than 2% sulfur
- Mercury reduction by 90% using activated carbon injection into the CDS unit
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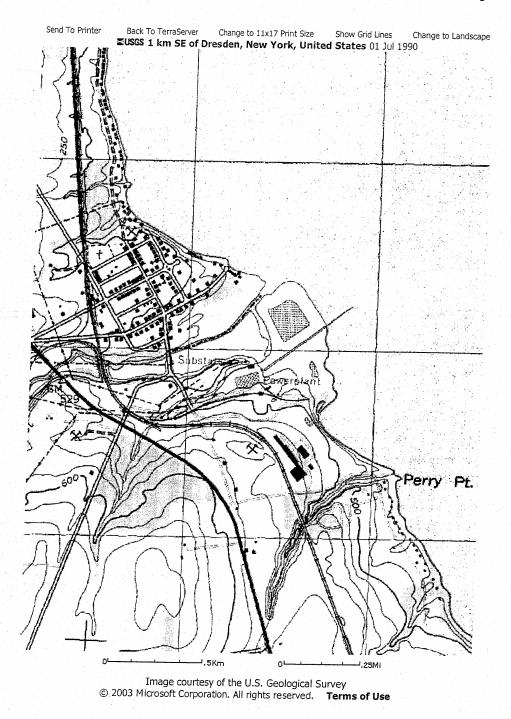
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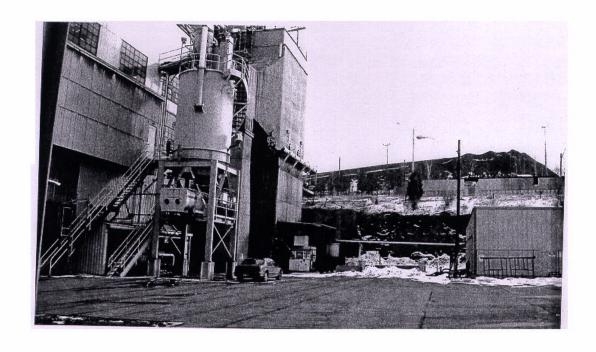
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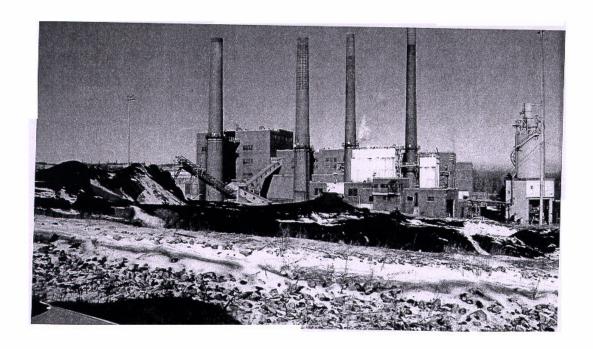
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# National Energy Technology Laboratory

February 19, 2004

Chief, Division of Endangered Species U.S. Fish and Wildlife Service 300 Westgate Center Drive Hadley, MA 01035

Dear Sir:

The United States Department of Energy (DOE) is considering participation, through a 4.5-year cooperative agreement with CONSOL Energy, Inc., in a project to demonstrate an integrated, multi-pollutant control system on the 104-megawatt, Unit 4 boiler at the AES Greenidge Generating Station near Dresden, NY. Under the cooperative agreement, CONSOL and AES would design, install, operate, and evaluate a multi-pollutant control system for mercury, SO<sub>2</sub>, and NO<sub>x</sub>, acid gases, and particulate emissions control at the Greenidge Station.

The proposed project would require removal of the existing electrostatic precipitator on Unit 4 and installation of a selective catalytic reduction reactor for  $NO_x$  control and a circulating dry scrubber for  $SO_2$ , Hg, HCl, HF, and  $SO_3$  control. The proposed control system would be expected to achieve the following control targets:

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- Reductions in emissions of other acid gases (HCl, HF, and SO<sub>3</sub>) by 95%

A description of the proposed project and graphics depicting its location are provided as Enclosures.

As part of our coordination and consultation responsibilities, and to comply with both Section 7 of the Endangered Species Act of 1973, as amended, and provisions of the Fish & Wildlife Coordination Act, we would appreciate receiving any information you have on wildlife resources, including endangered and threatened species or critical habitat, in the project area.

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The Multi-Pollutant Control system would be designed for long-term commercial operation following completion of the cooperative agreement with DOE. The total value of the cooperative agreement would be \$32.8 million; DOE's share would be approximately \$14.5 million.

The Greenidge Multi-Pollutant Control Project will demonstrate the commercial readiness of an emissions control system that, because of its low capital, operating, and maintenance costs, is particularly well suited to meet the emissions reduction requirements of a large group of smaller existing electricity generating units. The multi-pollutant control system offers the potential for low-cost, deep cleaning of air emissions, especially mercury, in support of the President's Clear Skies Initiative. Under the President's Clear Skies Initiative, emissions of SO<sub>2</sub> from power plants would be reduced by 73% from current emissions of 11 million tons annually to a cap of 4.5 million tons annually in 2010 and to 3 million tons annually in 2018. Emissions of NO<sub>x</sub> would be reduced by 67% from current a current level of 5 million tons annually to a cap of 2.1 million tons annually in 2008 and to 1.7 million tons annually in 2018. Mercury emissions would be reduced by 69% from current level of 48 tons to a cap of 26 tons in 2010 and 15 tons in 2018. The proposed project addresses the need for mercury emission reduction from coal-fired power plants, which stems from EPA's December 2000 announcement of plans to regulate emissions of mercury from coal-fired power plants. Successful implementation of the proposed technology demonstration would help provide an approach for achieving timely compliance with future mercury regulations.

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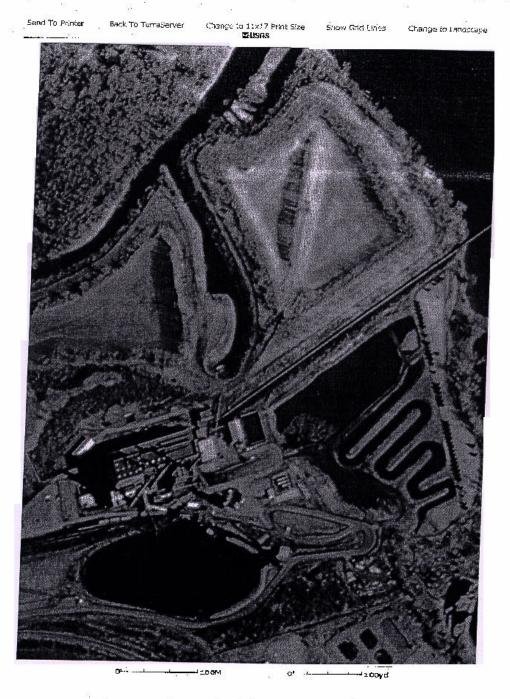
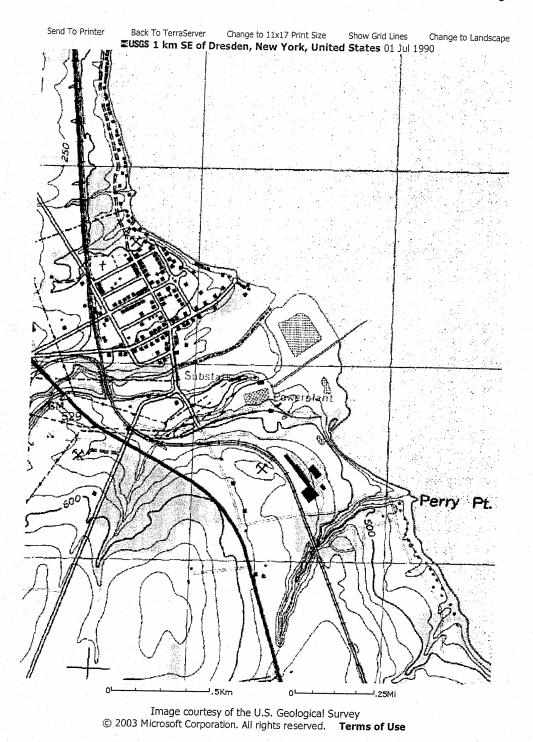
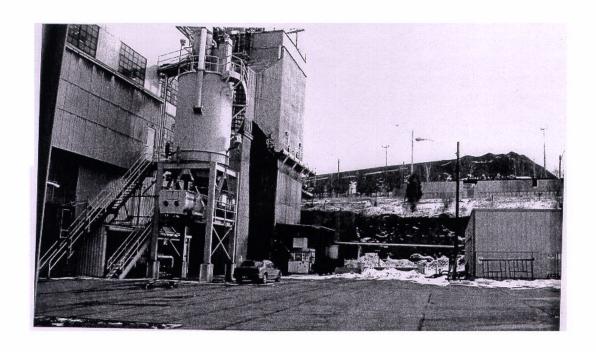


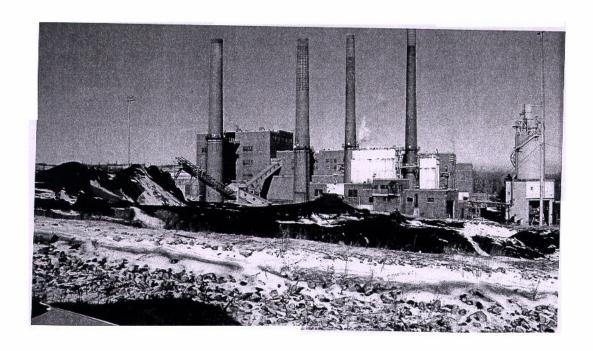
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### National Energy Technology Laboratory

March 19, 2004

Ms. Jean Pietrusiak New York State Department of Environmental Conservation Information Services 625 Broadway, 5<sup>th</sup> Floor Albany, NY 12233-4757

Dear Ms. Pietrusiak:

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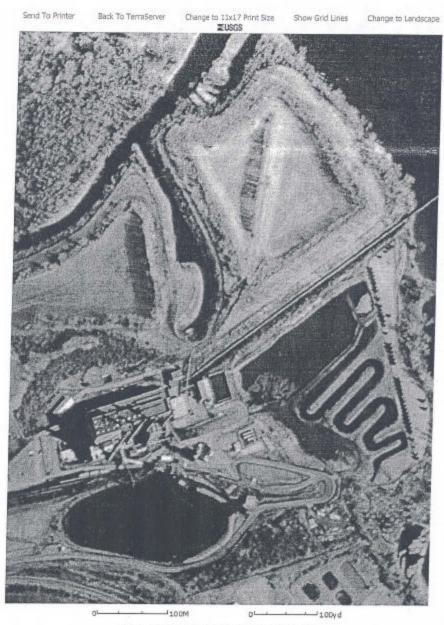


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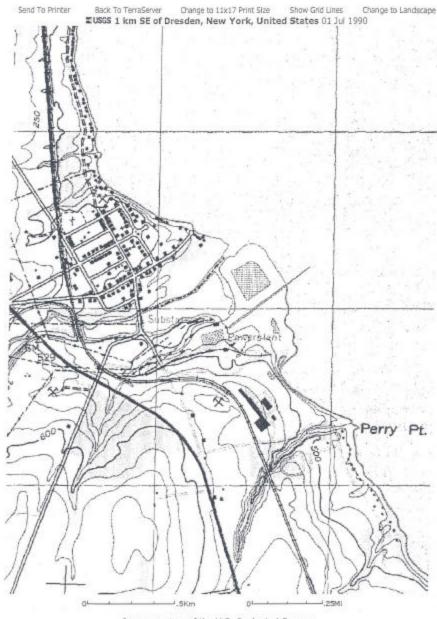


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